UNITED STATES PATENT AND TRADEMARK OFFICE

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10/614,738	07/07/2003	Debasis Mitra	Mitra 24-8-11-6	6213

46303 7590 11/20/2009	EXAMINER	
RYAN, MASON & LEWIS, LLP	KASRAIAN, ALLAHYAR	
1300 POST ROAD, SUITE 205		
FAIRFIELD, CT 96824	ART UNIT	PAPER NUMBER
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MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _05 August 2009_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-24_ is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-9,13,16 and 21-24_ is/are rejected.
7)☒ Claim(s) _10-12,14,15 and 17-20_ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a)☐ All   b)☐ Some * c)☐ None of:
       1.☐ Certified copies of the priority documents have been received.
       2.☐ Certified copies of the priority documents have been received in Application No. _____.
       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Reopening of Prosecution after Appeal Brief

1.   In view of the Appeal Brief filed on Aug. 05, 2009, PROSECUTION IS HEREBY

REOPENED. The rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

Remarks

2.   The present Office Action is in response to Applicant's appeal brief filed on Aug.

05, 2009. **Claims 1-24** are still pending in the present application.

Response to Arguments

3.   Applicant's arguments, see page 5-7 of the Appeal Brief request, filed on Aug.

05, 2009, with respect to the rejection(s) of claim(s) 1-22 and 24 under 35 U.S.C. 103(a)

have been fully considered and are persuasive. Therefore, the rejection has been

withdrawn. However, upon further consideration, a new ground(s) of rejection is made in

view of a new applied reference(s) as indicated in the current Office Action.

4.   Appellant's (herein after Applicant) arguments with respect to claim 23, filed Aug.

05, 2009 have been fully considered but they are not persuasive.

On the second paragraph of page 9 of the Appeal Brief argument section,

Applicant argues, "Appellants note that the word "length" is defined as "the longest

extent of anything as measured from end to end." (See, dictionary.com.) In the text cited

by the Examiner, Szviatovszki teaches that, 'if two paths have different, highest-affected

priority levels, the path with the lower priority level is chosen. But if the affected priority

levels are the same, *the 'smaller' path is selected with the lowest pre-empted bandwidth*

on the highest affected priority level.' (Col. 12, lines 37-43; emphasis added.) Contary to

the Examiner's assertion, Szviatovszki does *not* disclose or suggest length information;

Szviatovszki discloses priority levels and pre-empted bandwidth. Also, contrary to the

Examiner's assertion, Appellants could find *no* disclosure or suggestion of *length*

information in Shabtay." Examiner respectfully disagrees. Szviatovszki clearly discloses

the smaller path is selected with minimize affect of bandwidth on the highest affected

priority level (of the other paths). That means how particularly the smaller path is

selected and does not mean to exclude the limitation "if a length of the second shortest

path is equivalent to a length of the first shortest path, attempting to create a connection

on the second shortest path (col. 12 lines 37-43)". Examiner notes the first set of

limitations of the claim (determining a first shortest path between the source node and

destination node; pruning edges not having a first available bandwidth from the network,

thereby creating a first pruned network; computing a second shortest path between the

source node and the destination node using the first pruned network; if a length of the

second shortest path is equivalent to a length of the first shortest path, attempting to

create a connection on the second shortest path) are disclosed by Szviatovszki, on col.

13 lines 11-45 and the limitations can be interpreted explicitly on the 5th method of

TABLE 1 with three combinations of ordering metrics (such as shortest path and free

bandwidth selections).

In response to the Applicant's arguments, "Appellants also find no disclosure or

suggestion that the length information is provided by the OSPF protocol, or that it is

combined by bandwidth availability information of the links to utilize a rerouting

mechanism" and "Hameleers et al. was not used in the rejection of any claims and find

no record of Hameleers et al. in the prosecution", Examiner combines Szviatovszki,

Shabtay and Hameleers et al. to disclose OSPF protocol also provides the length

information.

On the third paragraph of page 11 of the Applicant's arguments/remarks with

respect to claim 7, Applicant argues, "Szviatovszki teaches *an unreserved bandwidth*

and a bandwidth requirement; Szviatovszki does *not* disclose or suggest a *measured*

load, does *not* disclose or suggest a *designed load,* does *not* disclose or suggest that,

when the designed load between the source node and the destination node is greater

than a measured load between the source node and the destination node, pruning

edges that do not have a first available bandwidth from the network, thereby creating a

first pruned network, and does *not* disclose or suggest that, *when the designed load*

between the source and a destination is not greater than a measured load between the

source and destination, pruning edges that do not have a second available bandwidth

from the network, thereby creating a first pruned network" (emphasis added by

Applicant). Examiner respectfully disagrees with Applicant since determination of a link

to have equitable bandwidth by comparison to a threshold (i.e. $B_{us} < B_{LPS}$) that clearly

means measuring the load for a link to determine it is cable to carry more load or not.

Furthermore, the claim is vague and indefinite it is not understood how the a first pruned

network is created *twice*: after *pruning edges that do not have a first available*

bandwidth from the network and *pruning edges that do not have a second available*

bandwidth from the network. (see rejection under 35 USC 112, second).

Applicant(s) are remained that the Examiner is entitled to give the broadest

reasonable interpretation to the language of the claim. The Examiner is not limited to

Applicant's definition, which is not specifically set fourth in the claims, *In re Tanaka et al,*

193 USPQ 139, (CCPA) 1977.

The references made herein are done so for the convenience of the Applicant.

They are not meant to be limiting and should be considered as a whole.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.   **Claims 7-9** are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 7 is vague and indefinite because it recites "there by creating a first pruned

network" on lines 9-10 and 13 of the claim. it is not understood how the a first pruned

network is created _twice_: after _pruning edges that do not have a first available_

bandwidth from the network and _pruning edges that do not have a second available_

bandwidth from the network.

Claims 8 and 9 are also rejected by the virtue of their dependency on **claim 7**.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the Examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in _Graham_ **v.** _John Deere Co._, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating
      obviousness or nonobviousness.

8.   **Claims 1-4, 6, 21, 22, and 24** are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Devi (US patent Application Pub. # 2003/0147400 A1)** in view of

Aukia et al. (US Patent # 6594268 B1) (hereafter Aukia) further in view of **Soumiya et**

al. (US patent Application Pub. # 2001/0037401 A1) (hereinafter Soumiya).

Consider **claims 1, 21 and 22**, Devi discloses an apparatus for traffic

engineering for in a network-based communication system, the apparatus comprising:

a memory (FIG. 2 for memory 206, and lines 1-3 of par. 0021);

and at least one processor, coupled to the memory (FIG. 2 processor 204 and

lines 1-3 of par. 0021);

Devi discloses the apparatus operative, a method, and a computer-readable

medium including computer codes (FIG. 2 code 208 and par. 0023 and 0024) to

perform the method, comprising:

to determine, in response to a request, whether any path of a plurality of

predetermined paths between a source node and a destination node meets at least one

requirement corresponding to the request, wherein the plurality of predetermined paths

are determined by substantially maximizing carried demand on a network using at least

traffic demand estimates, and network topology information, and by performing routing

for the substantially maximized carried demand (FIG.1 for nodes 102, links 104 and

server 200 and par. 0014; FIG. 2 for Demands 212 and Topology Information 214 lines

10-13 of par. 0026 for demands and request; lines 2-3 of par. 0004, 0005, 0028 and

0029 for traffic demand estimation and network topology); and

      selecting one of said predetermined paths based on current load measurement, if

a given path meeting the at least one requirement is found, to attempt to create a

connection utilizing the given path (abstract, par. 0005, 0018-0019, 0022; col. 0046-

0049 for optimum path selection specifically).

      However, Devi fails to explicitly disclose the maximizing carried demand on a

network using at least traffic demand estimates and network topology information.

      In the same field of endeavor, Aukia discloses the maximizing carried demand on

a network using at least traffic demand estimates and network topology information (col.

21 lines 23-51; col. 10 lines 24-33).

      Therefore, it would have been obvious to a person of ordinary skills in the art at

the time the invention was made to incorporate defining the network topology, traffic

characteristics and demand for service as taught by Aukia to the optimization method

based on demand estimate as disclosed by Devi for purpose of maximizing revenue

based on current and past history of data traffic of a router.

      However, Devi as modified by Aukia fails to disclose explicitly selecting one of

said predetermined paths based on current load measurement at source node.

      In the same field of endeavor, Soumiya discloses selecting one of said

predetermined paths based on current load measurement at source node (FIGS. 1A and

1B, abstract, par. 0232).

Therefore, it would have been obvious to a person or ordinary skill in the art at

the time the invention was made to incorporate calculating load in the source router as

taught by Soumiya to the method of selecting a path for traffic between source and

destination nodes disclosed by Devi as modified by Aukia for purpose of selecting a

transmission path.

Consider **claim 2**, Devi as modified by Aukia further modified by Soumiya

discloses the claimed invention **as applied to claim 1 above**, in addition Devi discloses

the carried demand comprises a total amount of demand that can be carried in the

network (lines 1-2 of par. 0026).

Consider **claim 3**, Devi as modified by Aukia further modified by Soumiya

discloses the claimed invention **as applied to claim 1 above**, in addition Devi discloses

the at least one requirement comprises a destination address and a bandwidth (FIG. 2

for destination 218 of demands 212, lines 5-6 of par. 0026; link information 224

including assigned bandwidth and available bandwidth, lines 10-15 of par. 0027 and

lines 1-3 of col. 0041).

Consider **claim 4** Devi as modified by Aukia further modified by Soumiya

discloses the claimed invention **as applied to claim 1 above**, and Aukia further

discloses determining the traffic demand estimates based at least in part on previously

measured traffic demands or historical traffic demands (FIG. 10 step 1003 and lines 46-

51 of col. 21); and

determining network topology by using information from link-state routing (FIG. 5

and lines 48-52 of col. 13).

Consider **claim 6** Devi as modified by Aukia further modified by Soumiya

discloses the claimed invention **as applied to claim 1 above**, and Aukia further

discloses the step of: refusing the connection request if there are no paths in the

plurality of predetermined paths meeting the at least one requirement or when the

connection utilizing the given path is unavailable (lines 20-22 of col. 22).

Consider **claim 24**, Devi as modified by Aukia further modified by Soumiya

discloses the claimed invention **as applied to claim 1 above**, in addition Devi discloses

the step of dynamically determining a path between the source node and the destination

node if none of said plurality of predetermined paths meet the at least one requirement,

wherein said dynamic path is determined at the source node (par. 0024 for updating

path assignment).

9.   **Claims 5, 7-9, 13, and 16** are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Devi (US patent Application Pub. # 2003/0147400 A1)** in view of

Aukia et al. (US Patent # 6594268 B1) (hereafter Aukia) in view of **Soumiya et al. (US**

patent Application Pub. # 2001/0037401 A1) (hereinafter Soumiya) further in view of

Szviatovszki et al. (US Patent # 6956821 B2) (hereafter Szviatovszki).

Consider **claim 5** Devi as modified by Aukia further modified by Soumiya

discloses the claimed invention **as applied to claim 1 above**, in addition Devi discloses

substantially maximizing the carried demand using at least the traffic demand estimates

and the network topology (lines 2-4 of par. 0004);

performing routing for the substantially maximized carried demand, thereby

determining a plurality of resultant paths(lines 7-9 of par. 0005);

However, Devi as modified by Aukia further modified by Soumiya fails to disclose

storing the plurality of resultant paths as the predetermined paths.

In the same field of endeavor, Szviatovszki discloses storing the plurality of

resultant paths as the predetermined paths (FIG. 2 block 20, lines 23-28 of col. 4).

Therefore, it would have been obvious to a person of ordinary skills in the art at

the time the invention was made to incorporate the storing of calculated paths to a

database as taught by Szviatovszki to the path calculation method as disclosed by Devi

as modified by Aukia further modified by Soumiya for purpose of saving the calculated

paths as future reference. The proper motivation is to use the saved calculated paths

from the database of a router for future estimation of the paths in a network.

Consider **claim 7** Devi as modified by Aukia further modified by Soumiya

discloses the claimed invention **as applied to claim 1 above**, in addition Devi discloses

the network topology comprises nodes interconnected through edges (FIG. 1 for nodes 102 and edges 104 and par. 0014);

However, Devi as modified by Aukia further modified by Soumiya fails to disclose the request is made by a source node; the method further comprises the steps of: determining whether a designed load between the source node and a destination node is greater than a measured load between the source and destination nodes; when the designed load between the source node and the destination node is greater than a measured load between the source node and the destination node, pruning edges that do not have a first available bandwidth from the network, thereby creating a first pruned network; and when the designed load between the source and a destination is not greater than a measured load between the source and destination, pruning edges that do not have a second available bandwidth from the network, thereby creating a first pruned network.

In the same field of endeavor, Szviatovszki discloses the request is made by a source node (FIGS. 1 and 2, lines 11-14 of col. 5);

the method further comprises the steps of:

determining whether a designed load between the source node and a destination node is greater than a measured load between the source and destination nodes (lines 50-58 of col. 1 and lines 59-67 of col. 9 for Dijkstra CSPF algorithm for minimizing cost of the path);

when the designed load between the source node and the destination node is greater than a measured load between the source node and the destination node,

pruning edges that do not have a first available bandwidth from the network, thereby

creating a first pruned network (lines 59-67 of col. 9; col. 13 lines 11-45 and the

limitations can be interpreted explicitly on the 5th method of TABLE 1 with three

combinations of ordering metrics such as shortest path and free bandwidth selections);

and

when the designed load between the source and a destination is not greater than

a measured load between the source and destination, pruning edges that do not have a

second available bandwidth from the network, thereby creating a first pruned network

(lines 59-67 of col. 9 and lines 29-38 of col. 10; col. 13 lines 11-45 and the limitations

can be interpreted explicitly on the 5th method of TABLE 1 with three combinations of

ordering metrics such as shortest path and free bandwidth selections).

Therefore, it would have been obvious to a person of ordinary skills in the art at

the time the invention was made to incorporate load balancing between source and

destination node with consideration of available bandwidth as taught by Szviatovszki to

the network management method as disclosed by Devi as modified by Aukia further

modified by Soumiya for purpose of choosing a path in order to balance the network

load.

Consider **claim 8 as applied to claim 7 above**, Szviatovszki further discloses

the first bandwidth is zero and the second bandwidth is a predetermined trunk

reservation (lines 49-56 of col. 10 and lines 1-5 of col. 11).

Consider **claim 9 as applied to claim 7 above**, Szviatovszki further discloses

the steps of determining whether a designed load, pruning edges that do not have a first

available bandwidth from the network, and pruning edges that do not have a second

available bandwidth from the network are performed prior to the step of determining, in

response to a request, whether any path of a plurality of paths meets at least one

requirement; and the method further comprises performing, if a given path meeting the

at least one requirement is not found, the following steps: pruning edges that do not

have a first available bandwidth from the first pruned network to create a second pruned

network; computing shortest path from the source node to the destination node in the

second pruned network; and attempting to create a connection on the shortest path

(lines 17-24 of col. 13).

Consider **claim 13**, Devi as modified by Aukia as modified by Soumiya further

modified by Szviatovszki discloses the claimed invention **as applied to claim 5 above**,

in addition Devi discloses the step of performing routing further comprises the step of

performing routing for the substantially maximized carried demand, subject to a plurality

of second constraints (FIG.3 with consideration of substantially maximized carried

demand as optimization of network paths between nodes, par. 0031, 0032 and par.

0025, the second constraints as service classes or capacity link).

Consider **claim 16 as applied to claim 5 above**, Szviatovszki further discloses

the step of performing routing further comprises the step of minimizing a total

bandwidth-length product subject to a plurality of constraints including path-assignment

constraints (lines 26-29, 33-39 and 46-50 of col. 9).

10.   **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Szviatovszki et al. (US Patent # 6956821 B2) in view of **Shabtay et al. (US Patent #**

6895441 B1) (hereafter Shabtay) further in view of **Hameleers et al. (US Patent**

Application Pub. # 2001/0026549 A1) (hereinafter Hameleers).

Consider **claim 23**, Szviatovszki discloses a method for traffic engineering for a

network-based communication system comprising a network having nodes

interconnected through edges, and wherein a source node requests a connection to a

destination node, the method comprising the steps of (FIG. 1):

determining a first shortest path between the source node and destination node

(col. 9 lines 33-39, col. 13 lines 10-30);

pruning edges not having a first available bandwidth from the network, thereby

creating a first pruned network (col. 13 lines 10-30)

computing a second shortest path between the source node and the destination

node using the first pruned network (Table 1 for 2nd method, and lines 14-26 of col. 13);

if a length of the second shortest path is equivalent to a length of the first shortest

path, attempting to create a connection on the second shortest path (col. 12 lines 37-

43).

However, Szviatovszki fails to explicitly discloses if a length of the second

shortest path is not equivalent to a length of the first shortest path, performing the

following steps: pruning edges not having a second available bandwidth from the first

pruned network, thereby creating a second pruned network; computing a third shortest

path between the source node and destination node using the second pruned network;

and attempting to create a connection on the third shortest path.

In the same field of endeavor, Shabtay discloses if a length of the second

shortest path is not equivalent to a length of the first shortest path, performing the

following steps (this condition could be interpreted as unsuccessful first search indicated

in lines 18-19 of col. 5; lines 14-21 of col. 4 and lines 12-22 of col. 5, for the first path

search with the required bandwidth; lines 35-42 and 61-67 of col. 4):

pruning edges not having a second available bandwidth from the first pruned

network, thereby creating a second pruned network (lines 19-22 of col. 5);

computing a third shortest path between the source node and destination node

using the second pruned network (lines 19-22 of col. 5); and

attempting to create a connection on the third shortest path (lines 19-22 of col. 5

for the second search, the path chosen from protected paths and unprotected path are

considered as the first pruned network and combined bandwidth is considered as the

second available bandwidth; col. 13 lines 11-45 and the limitations can be interpreted

explicitly on the 5th method of TABLE 1 with three combinations of ordering metrics such

as shortest path and free bandwidth selections).

Therefore, it would have been obvious to a person of ordinary skills in the art at

the time the invention was made to incorporate second bandwidth to prune the network

as taught by Shabtay to one the path metrics disclosed by Szviatovszki for purpose of

selecting best available links between different nodes in a network. The proper

motivation is to choose the best available links between nodes in a network.

However, Szviatovszki as modified by Shabtay fails to disclose whether one of

the metrics of OSPF is the distance metric such as physical distance.

In the same field of endeavor, Hameleers disclsoes one of the metrics of OSPF

is the distance metric such as physical distance.

Therefore, it would have been obvious to a person or ordinary skill in the art at

the time the invention was made to incorporate the metric such as physical distance as

taught by Hameleers to method of finding a route based on OSPF protocol with

consideration of available bandwidth of the paths disclosed by Szviatovszki as modified

by Shabtay for purpose of determining the shortest path between two nodes.

Allowable Subject Matter

Claims 10-12, 14, 15, and 17-20 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form including all

of the limitations of the base claim and any intervening claims.

Conclusion

11.   Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed**

to:

          Commissioner for Patents
          P.O. Box 1450
          Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

12.   Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Allahyar Kasraian whose telephone number is (571)

270-1772. The Examiner can normally be reached on Monday-Thursday from 8:00 a.m.

to 5:00 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone

number for the organization where this application or proceeding is assigned is (571)

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist/customer service whose telephone

number is (571) 272-2600.

/Allahyar Kasraian/
Examiner, Art Unit 2617

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617

A.K./ak

November 13, 2009